

# **COMMON GEOMETRIC PRACTICES** **RURAL ARTERIAL ROADS (OTHER THAN FREEWAYS)** ④

				TRAFFIC VOLUME											
				UNDER 400 A.D.T.		400-1500 A.D.T.		1500-2000 A.D.T.		OVER 2000 A.D.T.					
		DESIGN SPEED ⑥		40-50 M.P.H.		40-70 M.P.H.		40-70 M.P.H.		40-70 M.P.H.					
PAVEMENT WIDTH (FEET)	40 MPH		22		22		22		24						
	45 MPH														
	50 MPH														
	55 MPH														
	60 MPH		24												
	65 MPH														
70 MPH															
MINIMUM GRADED SHOULDER WIDTH (FT) ⑤		ALL SPEEDS		4		6		6		8					
MINIMUM CLEAR ROADWAY WIDTH OF NEW AND RECONSTRUCTED BRIDGES		ALL SPEEDS		APPROACH ROADWAY WIDTH ①											
MINIMUM RADIUS (FEET)	DESIGN SPEED		eMAX. 4%				eMAX. 6%				eMAX. 8%				
	30 MPH		300				275				250				
	35 MPH		420				380				350				
	40 MPH		565				510				465				
	45 MPH		730				660				600				
	50 MPH		930				835				760				
	55 MPH		1190				1065				965				
	60 MPH		1505				1340				1205				
	65 MPH		—				1660				1485				
	70 MPH		—				2050				1820				
NORMAL PAVEMENT CROSS SLOPES ③		RATE OF CROSS SLOPE = 2%													
NORMAL SHOULDER CROSS SLOPES		EARTH = 8% PAVED = 4%													
MAXIMUM GRADE (PERCENT)	M.P.H.	30	35	40	45	50	55	60	65	70	75	80			
	LEVEL	-		5		4		3							
	ROLLING	-		6		5		4							
	MOUNTAIN	-		8		7		6		5					
MINIMUM STOPPING SIGHT DISTANCE ①	(FEET)	200	250	305	360	425	495	570	645	730	820	910			
MINIMUM PASSING SIGHT DISTANCE ②	(FEET)	1090	1280	1470	1625	1835	1985	2135	2285	2480	2580	2680			

- ① MINIMUM STOPPING SIGHT DISTANCES ARE BASED ON HEIGHT OF EYE OF 3.5 FT AND HEIGHT OF OBJECT OF 2.0 FT. BOTH HORIZONTAL AND VERTICAL ALIGNMENTS ARE CONSIDERED.
- ② MINIMUM PASSING SIGHT DISTANCES ARE BASED ON HEIGHT OF EYE 3.5 FT AND HEIGHT OF OBJECT OF 3.5 FT. BOTH HORIZONTAL AND VERTICAL ALIGNMENTS ARE CONSIDERED.
- ③ NORMAL PAVEMENT CROSS SLOPES ON BRIDGES SHALL BE 2%.
- ④ FOR GUIDANCE ON FREEWAYS, REFER TO AASHTO, "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS", CURRENT EDITION.
- ⑤ WIDEN 3 FT FOR GUARDRAIL.
- ⑥ JUSTIFICATION FOR A DESIGN SPEED LESS THAN THE REGULATORY OR POSTED SPEED MUST BE DOCUMENTED AND AVAILABLE FOR REVIEW IN THE PROJECT FILES.